## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Cancelled) 2. (Cancelled) 3. (Cancelled) 4. (Cancelled) 5. (Cancelled) 6. (Cancelled) 7. (Cancelled) 8. (Cancelled) 9. (Cancelled) 10. (Cancelled) 11. (Cancelled) 12. (Cancelled) 13. (Cancelled) 14. (Cancelled) 15. (Cancelled) 16. (Cancelled) 17. (Cancelled) 18. (Cancelled) 19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

- 22. (Cancelled)
- 23. (Cancelled)
- 24. (Cancelled)
- 25. (Cancelled)
- 26. (Cancelled)
- 27. (Cancelled)
- 28. (Currently Amended) Synthetic particle consisting of at least one nucleic acid sequence or nucleic acid derivative sequence and one protein having a molecular weight in the range from 3900 to 4300 and consisting predominantly comprising more than 50 percent by weight of arginine, wherein an average diameter of the particle is between about 10 nm and 100 μm.
- 29. (Currently Amended) Synthetic particle according to Claim 28, where the protein is selected from the following group: protamine, protamine base, protamine derivatives or salts, preferably protamine sulfate or protamine chloride.
- 30. (Previously Added) Synthetic particle according to Claim 28, where the nucleic acid sequence is in single-stranded form.
- 31. (Previously Added) Synthetic particle according to Claim 28, where the nucleic acid sequence is an oligonucleotide or a derivative thereof.
- 32. (Previously Added) Synthetic particle according to Claim 31, where the oligonucleotide consists of at least 5 nucleotides.

33. (Previously Added) Synthetic particle according to Claim 31, where the derivative is a phosphorothicate or an anionic derivative.

## 34. (Cancelled)

- 35. (Previously Added) Synthetic particle according to Claim 28, where the particle carries a surface electric charge.
- 36. (Previously Added) Synthetic particle according to Claim 35, where the surface charge is in the range from -40 mV to +40 mV.
- 37. (Currently Amended) Process for the preparation of synthetic particles, said process comprising according to any of the preceding claims, with the following steps:
- a) preparation of an aqueous first salt-free solution containing a protein having a molecular weight in the range from 3900 to 4300, the protein consisting predominantly comprising more than 50 percent by weight of arginine,
- b) addition to the first solution of a second salt-free solution containing a nucleic acid sequence or nucleic acid derivative sequence and
  - c) mixing of the first and second solution.
- 38. (Previously Added) Process according to Claim 37, where the molar ratio of nucleic acid sequence or nucleic acid derivative sequence to protein is adjusted to produce a predetermined surface charge.

- 39. (Currently Amended) Process according to Claim 37, where the protein is selected from the following group: protamine, protamine base, protamine derivatives or salts, preferably protamine sulfate or protamine chloride.
- 40. (Previously Added) Process according to Claim 39, where protamine, protamine base, protamine derivatives are obtained from salmon sperm.
- 41. (Previously Added) Process according to Claim 37, where the nucleic acid sequence is in single-stranded form.
- 42. (Previously Added) Process according to Claim 41, where the nucleic acid sequence is an oligonucleotide or a derivative thereof.
- 43. (Previously Added) Process according to Claim 42, where the oligonucleotide consists of at least 5 nucleotides.
- 44. (Previously Added) Process according to Claim 42, where the derivative is a phosphorothicate or an anionic derivative.
- 45. (Previously Added) Process according to Claim 37, where the diameter of the particle is in the range from 10 nm to 100  $\mu m$ .
- 46. (Previously Added) Process according to Claim 37, where the particle carries a surface electric charge.

- 47. (Previously Added) Process according to Claim 37, where the surface charge is in the range from -40 mV to +40 mV.
- 48. (Currently Amended) Use of A method of using a protein having a molecular weight in the range from 3900 to 4300 and consisting predominantly comprising more than 50 percent by weight of arginine for the preparation of a synthetic particle consisting of , said method comprising the step of adding the protein and to at least one nucleic acid sequence or nucleic acid derivative sequence.
- 49. (Currently Amended) Use The method according to Claim 48, where the protein is selected from the following group: protamine, protamine base, protamine derivatives or salts, preferably protamine sulfate or protamine chloride.
- 50. (Currently Amended) Use The method according to Claim 48, where the nucleic acid is an oligonucleotide which is preferably single stranded and preferably consists of at least 5 nucleotides, or a derivative thereof which is preferably in the form of a phosphorothicate.
- 51. (New) The synthetic particle of claim 28, wherein the protein comprises more than 60 percent by weight of arginine.
- 52. (New) The process of claim 37, wherein the protein comprises more than 60 percent by weight of arginine.
  - 53. (New) The method of claim 48, wherein the protein comprises more than

60 percent by weight of arginine.